

## AMENDMENTS TO THE CLAIMS

**1 (currently amended)** A frame ~~generatingsynchronization~~ method comprising:  
inserting a synchronous word into data at a position determined based on a noise cycle of a transmission line in order to generate a frame; and  
~~composing data and a synchronous word to generate a frame;~~  
transmitting the generated frame from a transmitter to a receiver via thea transmission line;  
~~wherein said composing the data and the synchronous word arranges the synchronous word based on noise cycle of the transmission line.~~

**2 (currently amended)** A frame ~~generatingsynchronization~~ method as recited in claim 1, wherein said position~~the synchronous word~~ is arranged according to a predetermined arrangement algorithm.

**3 (currently amended)** A frame ~~generatingsynchronization~~ method as recited in claim 2, wherein a parameter of the predetermined arrangement algorithm comprises at least one of a length of the synchronous word and an arrangement interval of the synchronous word.

**4 (currently amended)** A frame ~~generatingsynchronization~~ method as recited in claim 34, wherein the length of the synchronous word is approximatelyalmo~~st~~ equal to a multiple of at~~he length of a multiple~~ of the noise cycle by a natural number.

**5 (currently amended)** A frame ~~generatingsynchronization~~ method comprising:  
inserting a plurality of synchronous words into data at a position determined based on a noise cycle of a transmission line in order to generate a frame; and  
~~composing data and a plurality of synchronous words to generate a frame;~~  
transmitting the generated frame from a transmitter to a receiver via thea transmission line;

wherein said ~~composing the data and the plurality of synchronous words~~  
arranges the plurality of synchronous words based on noise cycle of the transmission line.

**6 (currently amended)** A frame ~~generating~~synchronization method as recited in claim 5,  
wherein said inserting a plurality of synchronous words into data~~composing the data and~~  
~~the synchronous words~~ arranges the plurality of synchronous words over a section of  
frame as long as the noise cycle.

**7 (currently amended)** A frame ~~generating~~synchronization method as recited in claim 5,  
wherein ~~the~~ length of an arrangement interval of at least two~~one pair~~ of the plurality of  
synchronous words is different from ~~the~~ length of the noise cycle.

**8 (currently amended)** A frame ~~generating~~synchronization method as recited in claim 5,  
wherein at least two~~one pair~~ of the plurality of synchronous words are arranged using the  
same pattern.

**9 (currently amended)** A frame ~~generating~~synchronization method as recited in claim 1,  
wherein ~~the~~ length of the noise cycle is the length of a time interval whose noise level in  
the transmission line is beyond a predetermined threshold.